ACS
Simulation-Based Acquisition

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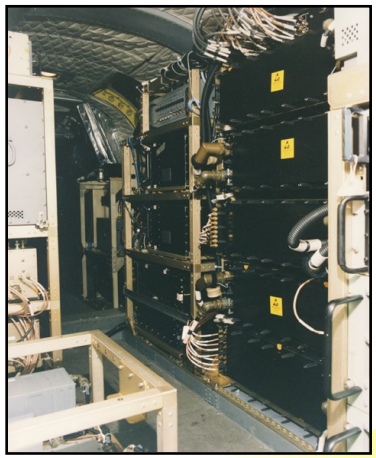
ACS Acquisition Approach

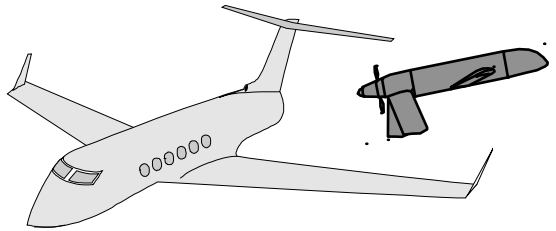
Aerial Common Sensor Will be a Multi-Function System Which Will Satisfy the Army's Critical Need for a Worldwide, Self-deployable, Airborne Reconnaissance, Intelligence, Surveillance, and Target Acquisition Capability

- ACS Is a Simulation Based Acquisition (SBA) With an Award to Three Competing Contractor Teams for Concept Exploration
- Following the Concept Exploration Phase in a M&S Environment
  - Government Conducted Source Selection Using Collected M&S Data
  - Winning Teams Are Maturing Their Virtual Model and Developing the System
  - Next Phase Downselect Will Be Based, In Part, on Collected M&S Data
- The Government Will Produce ACS and Provide Follow-on Sustainment for the Life of the System.

Aerial Common Sensor

Sensors





Platform

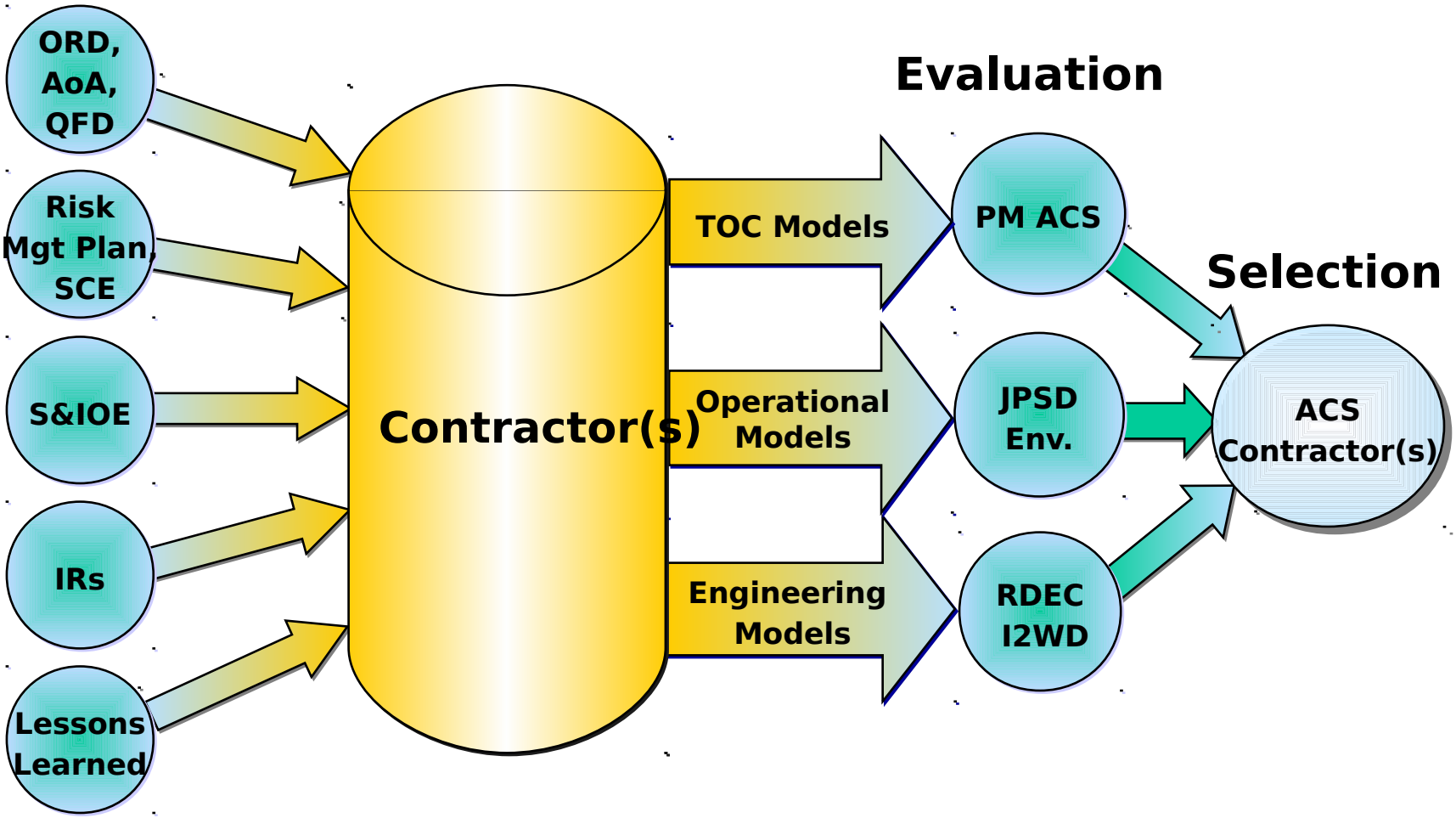
ACS

Data Link

Ground Station

Integration of Proven Components in a Continuing Evolution

PM ACS SBA Approach



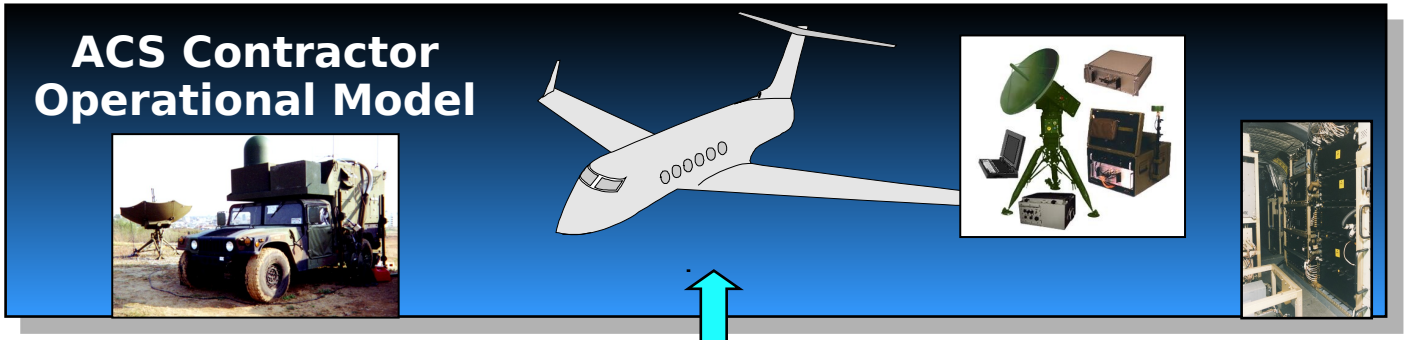
Operational MOE/MOPs Facilitated by JPSD Environment

MOE 1-5

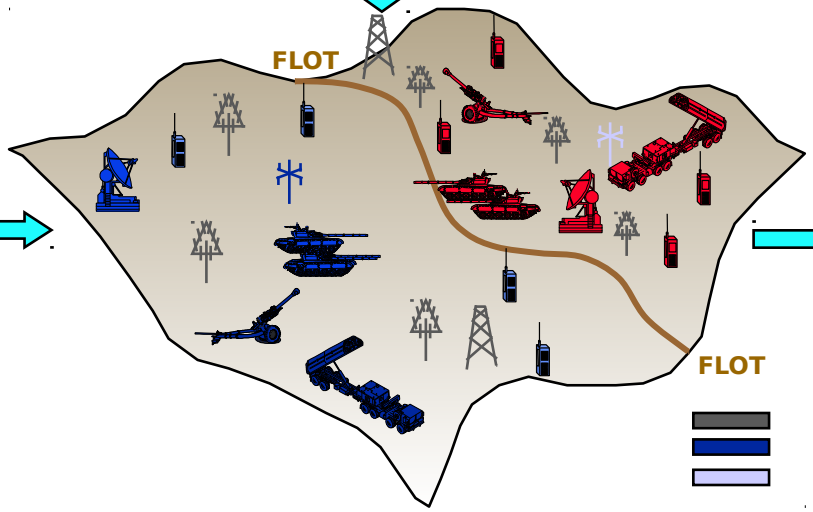
Measure ACS System

- #1 Target Detections
- #2 Target Locations
- #3 Throughput Capability
- #4 Target Identified
- #5 Capability to Report (Deferred)

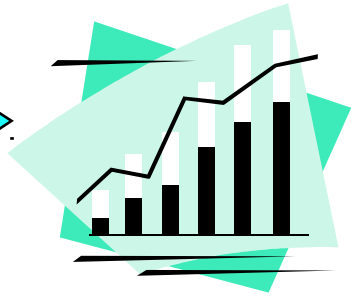
JPSD Synthetic Environment



- S&IOE Scenarios
- IRs
- GRCS/ARL Baseline Models



Data Collection



MOE 1-5

JPSD Synthetic Environment
- SWA
- Balkans

Results

- Enabled Communication and Evaluation of ACS Capabilities Using Graphical and Numerical Results From Operational Models
- Contractors Confirmed Sensor Model Behavior Through the Use of Calibration Scenarios
- Contractors Evaluated Design Trade Offs Between System Components
- Use of Operational Models Enabled Contractors and Government to Ascertain Credibility of Operational Concepts (e.g., The Number of Platforms, Flight Geometries, and Sensor Cross-cueing)